



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,691	09/19/2003	Mark Edward Simek	109934-43	6239

32968 7590 12/28/2006
KYOCERA WIRELESS CORP.
P.O. BOX 928289
SAN DIEGO, CA 92192-8289

EXAMINER

SHEDRICK, CHARLES TERRELL

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/665,691		SIMEK ET AL.	
	Examiner		Art Unit	
	Charles Shedrick		2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 21-40 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 2617

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims **21-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka US Patent Pub No.: 2006/0030375 A1 in view of Hama US 2002/0045467 A1 and further in view of Baratono et al., hereinafter, 'Baratono' US Patent No.: 6,889,064 B2.

Consider **claim 21**, Tanaka teaches a mobile phone (i.e., cellular phone), comprising: a housing **01** having a front face and a first side face substantially perpendicular to the front face (**figures 4, 6, 7, 9, 16-18, 20, 24-29, and 36-41**); a display **02** disposed is and outwardly directed from the front face of the housing (**figures 4, 7, 9, 15-18, 20, 24-27, 29, 36-41**); and a number keypad disposed in and outwardly directed from the first side face (**figures 4, 7, 9, 15-18, 20, 24-27, 29, 36-41**), the number keypad comprising at least ten depressible input keys numbered from 0 through 9.(i.e., see **paragraphs 0078-0079, 110, 150-153**)(**figures 12-14**).

However, Tanaka does not specifically teach a thumbpad disposed in and outwardly directed from the front face of the housing and below the display; the thumbpad utilized for display navigation and display option selection.

In the same field of endeavor, Hama teaches a thumbpad **104** disposed in and outwardly directed from the front face of the housing and below the display **102**; the thumbpad for display navigation and display option selection (**paragraph 0081 and figure 1a**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Tanaka to include a thumbpad disposed in and outwardly directed from the front face of the housing and below the display; the thumbpad for display

Art Unit: 2617

navigation and display option selection as taught by Hama for the purpose of scrolling items on the display.

However, Tanaka as modified by Hama does not teach the number keypad consisting of a single aligned row of at least ten depressible input keys numbered 0 through 9.

In analogous art, Baratono teaches the number keypad consisting of a single aligned row of at least ten depressible input keys numbered 0 through 9 (i.e., see figures and col. 3 line 64-col. 4 line 5). Baratono teaches that disposed about the periphery of the side wall 16 are a plurality of openings 20 in which are disposed a plurality of push buttons 30 which correspond to the numbers, symbols and alphabetical array associated with a telephone. Thus, there is provided on the side wall 16, in essence, a linear array of push buttons which correspond to the numbers of a telephone key pad, including both the star and asterisk as well as the pound sign, and include the digits one through zero, thus defining a linear key pad 31.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Tanaka as modified by Hama to include a linear keypad 31 on a side wall 16 for the purpose of space efficiency or safety as taught by Baratono.

Consider **claim 30**, Tanaka teaches a mobile phone 01 (i.e., cellular phone), comprising: a housing comprising a display face 02 having a length L and a width W (**figures 4, 7, 9, 15-18,20, 24-27, 29, 36-41**), a number keypad face substantially perpendicular to the display face and having the length L and a depth D (**figures 4, 7, 9, 15-18,20, 24-27, 29, 36-41**); a display 02 disposed in and outwardly directed from the display face of the housing (**figures 4, 7, 9, 15-18,20, 24-27, 29, 36-41**); a speaker 04 disposed in and outwardly directed from the display face of the housing and disposed above the display with respect to the length L(**figures 4, 7, 9, 15-**

Art Unit: 2617

18,20, 24-27, 29, 36-41); and a number keypad disposed in and outwardly directed from the number keypad face(**figures 4, 7, 9, 15-18,20, 24-27, 29, 36-41**), the number keypad comprising at least ten depressible input keys numbered from 0 through 9 (**figures 12-14**).

However, Tanaka does not teach a thumbpad disposed in and outwardly directed from the display face of the housing and disposed below the display, the thumbpad for display navigation and display option selection; a microphone disposed in and outwardly directed from the display face of the housing and disposed below the thumbpad.

In the same field of endeavor, Hama teaches a thumbpad **104** disposed in and outwardly directed from the display face **102** of the housing and disposed below the display **102**, the thumbpad for display navigation and display option selection (**paragraph 0081**); a microphone **109** disposed in and outwardly directed from the display face of the housing and disposed below the thumbpad (**figure 1a**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Tanaka to include a thumbpad disposed in and outwardly directed from the display face of the housing and disposed below the display, the thumbpad for display navigation and display option selection; a microphone disposed in and outwardly directed from the display face of the housing and disposed below the thumbpad as taught by Hama for the purpose of scrolling items on the display.

However, Tanaka as modified by Hama does not teach the number keypad consisting of a single aligned row of at least ten depressible input keys numbered 0 through 9.

In analogous art, Baratono teaches the number keypad consisting of a single aligned row of at least ten depressible input keys numbered 0 through 9 (i.e., see figures and col. 3 line 64-

Art Unit: 2617

col. 4 line 5). Baratono teaches that disposed about the periphery of the side wall 16 are a plurality of openings 20 in which are disposed a plurality of push buttons 30 which correspond to the numbers, symbols and alphabetical array associated with a telephone. Thus, there is provided on the side wall 16, in essence, a linear array of push buttons which correspond to the numbers of a telephone key pad, including both the star and asterisk as well as the pound sign, and include the digits one through zero, thus defining a linear key pad 31.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Tanaka as modified by Hama to include a linear keypad 31 on a side wall 16 for the purpose of space efficiency or safety as taught by Baratono.

Consider **claim 23 and as applied to the mobile phone of claim 21**, Tanaka as modified by Hama as modified by Baratono teaches wherein the side face has a length and depth, wherein the at least ten depressible input keys are linearly aligned on the side face (**figures 4, 6, 7, 9, 16-18, 20, 24-29, and 36-41**).

Consider **claims 24 and 36 and as applied to the mobile phone of claims 21 and 30**, Tanaka as modified by Hama as modified by Baratono teaches wherein the first side face is a right side face with respect to the front face such that the number keypad is on the right side face (i.e., keypads are on both side faces)(**figures 4, 6, 7, 9, 16-18, 20, 24-29, and 36-41**).

Consider **claims 26 and 38 and as applied to the mobile phone of claims 21 and 30**, Tanaka as modified by Hama as modified by Baratono teaches wherein the first side face is a left side face with respect to the front face such that the number keypad is on the left side face (i.e., keypads are on both side faces) (**figures 4, 6, 7, 9, 16-18, 20, 24-29, and 36-41**).

Art Unit: 2617

Consider **claim 28 and as applied to the mobile phone of claim 21**, Tanaka as modified by Hama as modified by Baratono teaches wherein the front face has a width W and a length L , and wherein a ratio of the length L to the width W is greater than 4(**figures 4, 6, 7, 9, 16-18, 20, 24-29, and 36-41**).

Consider **claim 29 and 40 and as applied to the mobile phone of claims 21 and 30**, Tanaka as modified by Hama as modified by Baratono teaches wherein the number keypad further comprises a "*" key and a "#" key (i.e., see **figures 12-14**), and wherein the at least ten depressible input keys numbered from 0 through 9 further correspond to letters "a" through "z" in conformance with a standard telephone keypad (i.e., see **figures 12-14**).

Consider **claim 31 and as applied to the mobile phone of claim 30**, Tanaka as modified by Hama as modified by Baratono teaches wherein the number keypad face is one of a left side face and a right side face(i.e., keypads are on both side faces)(**figures 4, 6, 7, 9, 16-18, 20, 24-29, and 36-41**).

Consider **claim 32 and as applied to the mobile phone of claim 30**, Tanaka as modified by Hama as modified by Baratono teaches wherein and a ratio of the width W to the depth D is less than 2(i.e., keypads are on both side faces)(**figures 4, 6, 7, 9, 16-18, 20, 24-29, and 36-41**).

Consider **claim 33 and as applied to the mobile phone of claim 30**, Tanaka as modified by Hama as modified by Baratono teaches wherein the at least ten depressible input keys are aligned linearly with respect to the length L (i.e., keypads are on both side faces)(**figures 4, 6, 7, 9, 16-18, 20, 24-29, and 36-41**).

Consider **claim 34 and as applied to the mobile phone of claim 30**, Tanaka as modified by Hama as modified by Baratono teaches wherein a ratio of the display face length L to the

Art Unit: 2617

display face width W is greater than 4(i.e., keypads are on both side faces)(**figures 4, 6, 7, 9, 16-18, 20, 24-29, and 36-41**).

Consider **claims 22,25,27,35,37, and 39, and as applied to claims 21,22,30, and 35**, Tanaka teaches wherein the number keypad are disposed on the first side face and the key are disposed on the left side face and right side faces (i.e., keypads are on both side faces)(**figures 4, 6, 7, 9, 16-18, 20, 24-29, and 36-41**).

However, Tanaka does not teach a thumbpad on the front face.

In the same field of endeavor, Hama as modified by Baratono teaches a thumbpad **104** disposed in and outwardly directed from the display face **102** of the housing and disposed below the display **102**, the thumbpad for display navigation and display option selection (**paragraph 0081**);.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Tanaka to include a thumbpad disposed in and outwardly directed from the display face of the housing and disposed below the display, the thumbpad for display navigation and display option selection as taught by Hama as modified by Baratono for the purpose of scrolling items on the display. In regards to the housing such that when held in a hand, at least one finger of the hand can depress an input key of the least ten depressible input keys on the first side face while a thumb of the hand can manipulate the thumbpad on the front face. It is noted that the language used by the applicant merely discloses the orientation in which the phone is held by the user. The manner of operating or holding the device does not differentiate apparatus claim from prior art (i.e., see MPEP 2114)

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sony Corp. JP2001-265490 - Teaches keys linearly aligned on side face perpendicular to front face.

Matsushita Electric Ind. Co. Ltd. JP2000-15774- teaches a number of applicants claimed limitations

Andress US Patent number 6,697,639 B2 teaches thumbpad below display for navigating display.

Shkolnikov US Patent No. 6,947,028 b2 teaches keys aligned on side face perpendicular to front face. Also note the phone orientation is based on right hand or left hand use.

Gambaro US Patent number 5,332,322 teaches keys aligned on side face perpendicular to front face.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2617


CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Shedrick whose telephone number is (571)-272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid Lester can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charles Shedrick
AU 2617
November 20, 2006


LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER